Attorney Docket No.: 052072-07186

Response to Office Action of December 7, 2006

Page 2 of 11

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1-20. (Previously Canceled)
- 21. (Currently Amended) A method for controlling a device for <u>heat</u> setting a material placed on a textile as it is processed by a printing machine, comprising the steps of:

connecting a plurality of control modules operably together through a backplane; programming an application module for controlling the heat generated by the device; receiving a power intensity value from a power intensity selector module; initiating a counter stored in a memory of a time selector module; incrementing the counter by the power intensity; comparing the counter and a base resolution; and,

transmitting a power intensity output signal to the device based on the counter and the base resolution.

- 22. (Previously Presented) The method of Claim 21, wherein the steps of the method are repeated continuously until the expiration of a predetermined period of time.
- 23. (Previously Amended) The method of Claim 21, further comprising the step of: selecting the power intensity value via the power intensity selector.
- 24. (Previously Presented) The method of Claim 21, further comprising the steps of: determining a feature of the device; and,

generating a shutdown signal based on a determination that the feature has exceeded a predetermined threshold value.

- 25. (Previously Presented) The method of Claim 21, further comprising the step of: re-initiating the counter after generating the power intensity output signal.
- 26. (Canceled)
- 27. (Previously Presented) The method of Claim 21, further comprising the step of: selecting at least one of a plurality of lamps to receive the power intensity output signal.

Attorney Docket No.: 052072-07186

Response to Office Action of December 7, 2006

Page 3 of 11

28. (Currently Amended) A system for controlling a device for <u>heat</u> setting a material placed on a textile printing machine, the device operably connected to a programmable logic controller comprising:

a power intensity value <u>selectable on a power intensity module</u>; an application module for:

initiating a counter;

incrementing the counter by the power intensity value;

comparing the counter and a base resolution; and,

generating a power intensity output signal based on the comparison of the counter and the base resolution to control the heat setting generated by the device.

- 29. (Previously Presented) The system of Claim 28, wherein a shutdown signal is generated for the system upon the expiration of a predetermined period of time.
- 30. (Previously Presented) The system of Claim 29, further comprising a time cycle selector for determining the predetermined period of time.
- 31. (Previously Presented) The system of Claim 28, further comprising a power intensity selector for determining the power intensity value.
- 32. (Previously Presented) The system of Claim 28, further comprising a sensor for determining a feature of the system.
- 33. (Previously Presented) The system of Claim 32, further comprising an actuator for generating a shutdown signal upon a determination that the feature has exceeded a predetermined threshold value.
- 34. (Previously Presented) The system of Claim 28, wherein the application module is also for re-initiating the counter after generating the power intensity output signal.
- 35. (Previously Presented) The system of Claim 28, wherein the application module is also for transmitting the power intensity output signal to a device for setting the material.
- 36. (Previously Presented) The system of Claim 28, further comprising a selector for selecting at least one of a plurality of lamps to receive the power intensity output signal.

Attorney Docket No.: 052072-07186

Response to Office Action of December 7, 2006

Page 4 of 11

37. (Currently Amended) A system for controlling a device for <u>heat</u> setting material placed on a textile <u>as it is processed by a printing machine</u>, the device operably connected to a programmable logic controller comprising:

a power intensity selector on a module for selecting a power intensity value;

a time cycle selector on a module for selecting a duration value;

a temperature selector on a module for selecting a temperature value;

a base resolution selector on a module for selecting a base resolution;

a <u>lamp</u> selector on a module for selecting at least one of a plurality of lamps to receive the power intensity output signal;

an application module configured to initiate a counter; increment the counter by the power intensity value; determine whether the counter is greater than the base resolution; upon a determination the counter is greater than the base resolution, generate a power intensity output signal and decrementing the counter by the base resolution; otherwise, increment the counter by the power intensity value; sense the temperature of an element of the system; determine whether the temperature of the element of the system has exceeded the temperature value; upon a determination the temperature of the element of the system has exceeded the temperature value, generate a system shutdown signal; compare the counter and the duration value; and, based upon the comparison of the counter and the duration value, generate a system shutdown signal; and

a backplane operably connecting the modules to each other to provide the communication path between modules to handle input and output signals from each module.

38. (Currently Amended) A system for controlling a device for <u>heat</u> setting a material placed on a textile <u>as it is processed by a printing machine</u>, the device operably connected to a programmable logic controller comprising:

a backplane operably connecting each module in the programmable logic controller together for generating a power intensity value;

an application module for:

initiating a counter;

incrementing the counter by the power intensity value;

Attorney Docket No.: 052072-07186

Response to Office Action of December 7, 2006

Page 5 of 11

comparing the counter and a base resolution; and,

generating a power intensity output signal based on the comparison of the counter and the base resolution, wherein the base resolution is proportional to the power intensity value.